In the specification:

Please insert the following paragraphs and Table for the last paragraph (partial paragraph) on page 19:

-- The powder disperser was tested at a pressure of 30 psig which resulted in a flow rate of 10.4 L/min through the apparatus. Approximately 5 mg of a test powder, prepared by spray drying a solution of mannitol and bovine serum albumin, was loaded into the venturi intake and the solenoid valve was actuated. We checked for powder remaining in the venture intake to determine whether there was an adequate air supply to disperse the powder. The particle size distribution measured from the chamber using an Aerosizer (API, Hadley, MA) particle size analyzer showed that the aerosol contained particles between 1 and 4 μm in diameter.

**Results**

Results comparing the different chamber designs for containing the aerosol are reported in Table 1. The maximum volume of the aerosol contained by the chamber was calculated from the maximum operating time and the total airflow. The proportion of the aerosol volume to the volume of the chamber given in the % Chamber Volume column is a way of comparing the effectiveness of the different chamber designs for containing the aerosol. The air volume needed to disperse 5 mg of powder could be efficiently captured in all of the chamber configurations tested. The designs that induced a vertical airflow pattern in the chamber retained a larger volume of aerosol.

TABLE 1

Aerosol Capture Efficiency for several Holding Chamber Designs

| | Nebulizer | | | Powder Disperser | | |
|---|---|---|---|---|---|---|
| Chamber | Aerosol Volume | % of Chamber Volume | Increase over base | Aerosol Volume | % of Chamber Volume | Increase over base |
| Design 1 bottom fill | 348 mL | 45.8% | -- | 69. mL | 9.24% | -- |
| Design 1 tangential fill | 665 mL | 88.7% | 1.94 | 95.3 mL | 12.7% | 1.38 |
| Design 2 cone baffle | 728 mL | 97.1% | 2.12 | 104 mL | 13.9% | 1.50 |
| Design 3 hemisphere baffle | 950 mL | 127% | 2.77 | 164 mL | 21.9% | 2.37 |
| Design 4 | 855 mL | 114% | 2.49 | 161 mL | 21.5% | 2.33 |

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